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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/604,173	06/30/2003	SHI-HSIANG LU	10873-US-PA	1172

31561 7590 06/28/2006

JIANQ CHYUN INTELLECTUAL PROPERTY OFFICE
7 FLOOR-1, NO. 100
ROOSEVELT ROAD, SECTION 2
TAIPEI, 100
TAIWAN

EXAMINER	
WU, XIAO MIN	
ART UNIT	**PAPER NUMBER**
2629	

DATE MAILED: 06/28/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/604,173	LU ET AL.	
	Examiner	Art Unit	
	XIAO M. WU	2629	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *07 June 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-14* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-14* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 6/7/2006 has been entered.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-8, 10-13 are rejected under 35 U.S.C. 102(b) as being anticipated by Kihara et al. (US Patent No. 5,889,504).

As to claim 1, Kihara discloses a display driving circuit (fig. 4), comprising: a plurality of driving stages (Fig. 7) , wherein the driving stages are electrically coupled in serial, (see Fig. 7) and each of the driving stages comprises a conducting path so as to transmit an electric signal from a previous driving stage to a next driving stage (e.g. right normal shift register); and a plurality of driving lines (e.g. the column line 1 to each pixel cell), wherein each of the driving lines corresponds to one of the driving stages respectively (see Fig. 7), and the driving line is electrically coupled to an output terminal of a corresponding driving stage (Fig. 7); a plurality of redundant devices (e.g. right redundant shift registers) installed in part of the driving stages (11-

14, Fig. 4), respectively, and the redundant device is capable of supplying an extra conducting path to transmit an electric signal from the previous driving stage to the next driving stage via the current driving stage while the original conducting path in the corresponding driving stage is broken (e.g. when the normal shift register is broken).

As to claim 2, Kihara discloses each of the redundant device (e.g. right redundant circuit as shown in Fig. 4) is added into a driving stage subsequent to a plurality of preceding driving stages that are installed separately departing from a predetermined number of the driving stages with each other (see Fig. 4).

As to claim 3, Kihara discloses each of the redundant device (e.g. right redundant circuit as shown in Fig. 4) is added to a plurality of contiguous driving stages subsequent to a predetermined number of the driving stages with each other (see Fig. 4).

As to claims 4, 10, Kihara discloses a display driving circuit, comprising: a plurality of driving stages (11-14, Fig. 4), electrically coupled in serial; a plurality of redundant stages (e.g. SR2 and SR4), alternatively disposed between the driving stages (SR1, SR3) and electrically coupled to adjacent driving stages, and each of the redundant stage comprises a conducting path so as to transmit an electric signal from the previous driving stage to the next driving stage; and a plurality of driving lines, wherein each of the driving lines (e.g. the column line 1 to each pixel cell) corresponds to one of the driving stages or the redundant stages respectively, and each of the driving line is electrically coupled to an output terminal of a corresponding driving stage or a corresponding redundant stage (e.g. when the normal shift register is broken)..

As to claims 5, 11, Kihara discloses each of the redundant stage (e.g. RB3, Fig. 4) includes a driving stage (SR1, SR3) and a redundant device (SR2, SR4).

As to claims 6, 12, Kihara discloses each pair of two adjacent redundant stages (e.g. two adjacent SR4s) further comprises at least one another driving stage (SR3) electrically coupled there between.

As to claims 7, 13, Kihara discloses the redundant device comprises a plurality of transistors (72, 73, Fig. 7) in the driving stage.

As to claims 8, 14, Kihara discloses the redundant device is capable of supplying an extra conducting path to transmit an electrical signal from the previous driving stage to the next driving stage via the current redundant stage while the original conducting path in the corresponding path in the corresponding driving stage of the redundant stage is broken. (col. 9, lines 3-36).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6. Claims 9 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kihara et al. (US Patent No. 5,889,504).

As to claims 9 and 14, Kihara shows four transistors (72, 73) and a switching circuit (71 and a plurality of invertors in the driving stage. Kihara does not specifically discloses that there are total six transistors in the driving stage. However, it would have been obvious to one of ordinary skill in the to have realized that more than four transistors could be integrated into the driving stage since the switch circuit or the invertors could also include transistors.

Response to Arguments

7. Applicant's arguments filed 6/7/2006have been fully considered but they are not persuasive.

With respect to claim 1, applicant argues that Kihara does not disclose "a plurality of redundant devices installed in part of the driving stage". This argument is not persuasive. As shown Fig. 4, Kihara clearly teaches a plurality of redundant devices (SR2, SR4) installed in part of the driving stage (RB3, Fig. 4).

With respect to the newly submitted independent claims 4 and 10, applicant argues that Kihara fails to disclose "a redundant stage having a redundant device is installed subsequent to N number of the preceding general driving stages". This argument is not persuasive because this limitation is not found in the claims 4 and 10. Although claims 4 and 10 require "a plurality of redundant stages, alternatively disposed between the driving stages and electrically coupled to adjacent driving stages", Fig. 4 of Kihara clearly discloses such limitations as required in claims. See the discussion of claims 4 and 10 of the rejection above.

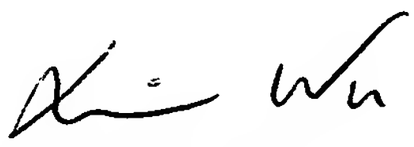
Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to XIAO M. WU whose telephone number is 571-272-7761. The examiner can normally be reached on 6:30 am to 4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, RICHARD HJERPE, can be reached on 571-272-7691. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

x.w.
June 23, 2006



XIAO M. WU
Primary Examiner
Art Unit 2629